The following shall be the Mitigation Monitoring or Reporting Program for **FORMER OTAY SKEET AND TRAP SHOOTING RANGE REMEDIAL ACTION PLAN (RAP)**; CASE NUMBER(S): 3910 05-19-013 (ER); APNs: 644-060-13, 644-060-14 and 645-030-18; SITE LOCATION: 5350 HERITAGE ROAD, CHULA VISTA, CA.

Public Resources Code Section 21081.6 requires the County to adopt a mitigation reporting or monitoring program for any project that is approved on the basis of a Mitigated Negative Declaration, for which findings are required under Section 21081(a)(1). The program must be adopted for the changes to a project, which the County / City has adopted, or made a condition of project approval, in order to mitigate or avoid significant effects on the environment. The program must be designed to ensure compliance, during implementation of the Former Otay Skeet and Trap Shooting Range Remedial Action Plan (RAP).

The mitigation monitoring program is comprised of all the environmental mitigation measures adopted for the project. The full requirements of the program (such as what is being monitored, method and frequency, who is responsible, and required time frames) are found within the individual project conditions. These conditions are referenced below by category under the mechanism which will be used to ensure compliance during project implementation. **Mitigation Measures are based on the Initial Study (IS), prepared for the Former Otay Skeet and Trap Shooting Range, dated 03-22-12.**

A. Subsequent Project Permits

Compliance with the following conditions is assured because specified subsequent permits or approvals required for this project will not be approved until the conditions have been satisfied:

None

Annual Inspections

Compliance with the following conditions is assured because the annual inspections will evaluate the status of compliance and, if necessary, pursue the remedies specified in the project permits or available under local or state law:

None

Enforcement

Compliance with the following Mitigation Measures/Project Design Features is assured because complaints of non-compliance may be provided by the public to the County which may then investigate the status of compliance and pursue enforcement:

1. AIR QUALITY

AQ-1. The project applicant will implement the following best management practices (BMPs) to further reduce emissions during temporary construction activities.

- Individual truck idling in excess of five consecutive minutes will be prohibited, unless allowed under Title 13 of the California Code of Regulations §2485 (California Air Resources Board's [CARB's] Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling).

- Suspend the use of all construction equipment during first-stage smog alerts.

- Electricity or alternative fuels for on-site mobile equipment will be used instead of diesel equipment to the extent feasible.

- Electric equipment will be used to avoid emissions from gas or diesel equipment in portions of the project site where electricity is available.

- Diesel-power construction equipment shall use low-sulfur diesel fuel.

- Water will be used during construction activities to control fugitive dust.

- Suspend grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour.

- Minimize disturbed areas during construction.

- Post and enforce speed limits to reduce airborne fugitive dust from vehicular traffic during construction.

- Ensure that all construction equipment is properly tuned and maintained prior to and for the duration of construction.

- Portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, require CARB Portable Equipment Registration or local APCD permit.

- Provide adequate ingress and egress to minimize vehicle idling and traffic congestion.

AQ-2. The following mitigation measures from the *Otay Ranch General Development Plan Program Environmental Impact Report* (EIR) shall be implemented, where feasible and applicable.

- Minimize simultaneous operation of multiple construction equipment units;
- Use low pollutant-emitting construction equipment as practical;
- Use electrical construction equipment as practical;
- Use catalytic reduction for gasoline-powered equipment;
- Use injection timing retard for diesel-powered equipment;
- Water the construction areas a minimum of twice daily to minimize fugitive dust;
- Stabilize graded areas as quickly as possible to minimize fugitive dust;
- Pave permanent roads as quickly as possible to minimize dust;
- Use electricity from power poles instead of temporary generators during site activities, as feasible;
- Apply chemical stabilizer or pave the last 100 feet of internal travel path within the construction site prior to public road entry;
- Install wheel washers adjacent to a paved apron prior to vehicle entry on public roads;
- Remove any visible track-out into traveled public streets within 30 minutes of occurrence;
- Wet wash the construction access point at the end of each workday if any vehicle travel on unpaved surfaces has occurred;
- Provide sufficient perimeter erosion control to prevent washout of silty material onto public roads;
- Cover haul trucks or maintain at least 12 inches of freeboard to reduce blow-off during hauling; and

- Suspend all soil disturbance and travel on unpaved surfaces if winds exceed 25 miles per hour.

BIO-3 Fencing - Prior to issuance of Land Development Permits, including clearing or grubbing and grading, the project Applicant shall install fencing in accordance with Chula Vista Municipal Code (CVMC) 17.35.030. Prominently colored, well-installed fencing and signage shall be in place wherever the limits of grading are adjacent to sensitive vegetation communities or other biological resources, as identified by the qualified monitoring biologist. In addition, fencing shall also be in place to delineate the modified limits of work associated with RA1 (construction phases 1-3) during the nesting season for of coastal California gnatcatchers (February 15 to August 15) and least Bell's vireo (March 15 to September 15). The modified Limits of Work for phases 1 - 3 are illustrated on Figures 7 – 9 of the Noise Resources Report. All temporary fencing shall be shown on grading plans and shall remain in place during all construction activities. Prior to release of any required grading and/or improvement bonds, a qualified biologist shall provide evidence that work was conducted as authorized under the approved land development permit and associated plans.

BIO-4 Construction BMPs - Appropriate construction BMPs must be used during construction to ensure avoidance of any indirect temporary impacts to adjacent special status habitats. Examples of BMPs that may be used, if necessary, include but are not limited to those outlined in the project SWPPP, such as dust control measures (WE-1, WM-3, EC-1), training all on-site personnel on the proper use of chemicals and material storage (WM-1, WM-2), spill prevention and control (NS-10, WM-4), waste management (WM-5, WM-7, WM-8, and WM-9), and erosion control devices (EC-3, EC-6, SE-1, SE-5, TC-1, SE-7, EC-15, SE-5, EC-4).

BIO-9 HLIT Permit - Prior to the issuance of any land development permits including clearing, grubbing and/or grading, the Applicant shall be required to obtain a HLIT Permit pursuant to Section 17.35 of the City of Chula Vista Municipal Code. Findings for issuance of a HLIT permit are provided in the *Biological Resources Report* (TRC, 2012) based on Section 17.35.080 of the City of Chula Vista Municipal Code.

BIO-10 SWPPP - The project SWPPP shall be implemented for the duration of the project to control storm water runoff such that erosion, sedimentation, pollution, etc. are minimized (TRC, 2011c). Measures outlined in the plan include the use of silt fencing and straw wattles along disturbed areas during and after grading and around soil stockpiles (SE-1 and SE-5, respectively), and watering trucks during excavation and hauling activities

to reduce windborne dust (WE-1). During remediation activities, material stockpiles shall be placed such that they cause minimal interference with on-site drainage patterns. This will protect any downstream special status vegetation from being inundated with sediment laden run-off.

TR-1 Due to the proximity of the project site to Cricket Wireless Amphitheatre, it is recommended that off-site construction-related traffic cease a minimum of two hours prior to the start of an event at Cricket Wireless Amphitheatre. All traffic control, related to this project should be cleared from Heritage Road two hours prior to all events at Cricket Wireless Amphitheatre.

TR-2 Prior to the City's issuance of any Land Development Permits, a traffic control plan shall be prepared to the satisfaction of the City Engineer, Police Chief, and Fire Marshall. At a minimum, the Traffic Control Plan shall identify the type, quantity and location of traffic control signage, striping, detours, flagging operations and any other devices which will be used during construction to guide motorists safely along public roadways. The traffic control plan shall also include provisions for coordinating with adjacent property owners including Cricket Amphitheater, Knott's Soak City and the Otay Valley Quarry regarding event times and to avoid any conflicts with any existing operational control plans. The Traffic Control Plan will ensure that access and traffic flow will be maintained, and that emergency access will not be restricted.

TR-3 Flaggers are recommended at the project access roads to assist slower moving trucks as they join the traffic flow on Heritage Road.

TR-4 Limits to construction related traffic shall be identified on the Traffic Control Plans that will be prepared and submitted to the City of Chula Vista for approval prior to the issuance of Land Development Permits.

TR-5 Adjustments to haul hours may occur if the addition of truck trips during the a.m. and p.m. peak period result in observed operational issues.

4. PROJECT DESIGN FEATURES

NS-1, Water Conservation Practices – Water will be used only as needed for dust control during grading operations and to facilitate revegetation, but not to an extent that a surface flow would be created.

NS-9, Vehicle and Equipment Fueling - Vehicle and equipment fueling will be performed at the site during construction.

NS-10, Vehicle and Equipment Maintenance - Vehicle and equipment maintenance will be performed at the site. A spill kit will be maintained at the site and all spills from vehicles will be contained and cleaned up immediately.

WM-1, Material Delivery and Storage – Fuel and equipment maintenance fluids will be delivered and stored onsite using properly sealed containers and stored only in designated areas. Proper secondary spill containment structures will be used to prevent spills from contacting site soil and to prevent exposure to rain.

WM-2, Material Use – Site employees will be trained on proper use of chemicals to minimize spills. Material Safety Data Sheets (MSDS) will be provided for all chemicals being used onsite. Fluid quantities will be documented in the site Construction Materials Inventory Log.

WM-3, Stockpile Management – A fiber roll or silt fence sediment barrier, or earthen berm, will be placed around all stockpiles of soil, concrete demolition waste or other materials, stockpiles may be covered if left inactive or wind erosion occurs.

WM-4, Spill Prevention and Control – Fuel and equipment maintenance fluids will be stored at the site. A spill kit will be maintained at the site and all spills from vehicles will be contained and cleaned up immediately.

WM-5, Solid Waste Management – Solid wastes generated from demolition activities will be promptly removed and disposed at an appropriate off-site facility.

WM-7, Contaminated Soil Management – The purpose of the remediation project is to appropriately manage impacted soils at the site. Therefore, if this California Storm Water Quality Association (CASQA) guidance conflicts with the remediation plan, the Qualified SWPPP Practitioner (QSP) should attempt to reconcile the intent of this guidance with the requirements of the remediation plan. In general, it is anticipated that the site-specific remedial plan will take precedence over this general guidance.

WM-8, Concrete Waste Management – Stockpiles of concrete demolition waste should be managed in accordance with BMP WM-3, Stockpile Management.

WM-9, Sanitary/Septic Waste Management – On-site sanitary facilities will be secured and regularly serviced. They will also have secondary containment.

EC-1, Scheduling – Soil disturbance activities are scheduled to occur over a period of approximately three to four months beginning in June 2012. Soil disturbance activities will consider weather forecast before commencement.

EC-3, Hydraulic Mulch – Hydraulic mulch such as bonded fiber matrix (BFM) will be utilized in inactive disturbed areas and potentially on soil stockpiles if needed. It will be re-applied as necessary. Alternatively, BMP EC-6 may be used especially if water availability and use becomes an issue.

EC-4, Hydroseeding – A city approved seed mix will be applied along with hydraulic mulch (EC-3) to disturbed areas in order to provide final stabilization through revegetation. The hydraulic mulch will provide temporary stabilization while the applied seeds germinate and grow adequately enough to meet permit closure criteria.

EC-6, Straw Mulch – Straw mulch will be utilized in disturbed areas along with a plant-based binder/tackifier. The binder/tackifier will be re-applied as necessary.

EC-15, Soil Preparation/Roughening – Prior to hydroseeding and fiber roll installation, disturbed areas will be prepared in order to facilitate revegetation. Areas that may have been compacted, either incidentally due to heavy vehicle traffic or purposely to avoid subsurface settlement, will have shallow surface soils be disked scarified or otherwise decompacted to facilitate plant growth. Disturbed soils intended for hydroseeding will be roughened in accordance with the CASQA BMP guidance in order to reduce erosion.

SE-1, Silt Fence – Silt fence will be used for perimeter protection along disturbed areas during and after grading. Silt fence may also be used around soil stockpiles.

SE-5, Fiber Rolls – Straw wattles will be placed in hydroseed areas prior to hydroseeding at intervals appropriate for the slope to control eroded sediment. Straw wattles may be used for perimeter protection along disturbed areas during and after grading in areas where expected flows are low. Rolls may also be used around soil stockpiles.

SE-7, Street Sweeping and Vacuuming – roadways will be maintained to prevent soil and sediment from leaving the site property.

SE-10, Storm Drain Inlet Protection – Proper storm water drain protection (e.g. straw wattles, geotextile insert, rock bags) will be employed to prevent sediment run-off into storm drains.

TC-1, Stabilized Construction Entrance/Exit – The ingress/egress point of the excavation area will be surfaced with gravel and use rattle plates to minimize tracking of soil onto stabilized construction roadways and public roads.

WE-1, Wind Erosion Control – A water truck will operate during excavation and hauling activities to reduce windborne dust.

. Ongoing Mitigation

Compliance with the following conditions is assured because County staff will monitor the on-going requirements, and if necessary, pursue the remedies specified in the mitigation monitoring security agreement and the mitigation monitoring agreement, with the project proponent, Flat Rock Land Company:

1. AIR QUALITY

AQ-1. The project applicant will implement the following best management practices (BMPs) to further reduce emissions during temporary construction activities.

- Individual truck idling in excess of five consecutive minutes will be prohibited, unless allowed under Title 13 of the California Code of Regulations §2485 (California Air Resources Board's [CARB's] Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling).

- Suspend the use of all construction equipment during first-stage smog alerts.

- Electricity or alternative fuels for on-site mobile equipment will be used instead of diesel equipment to the extent feasible.

- Electric equipment will be used to avoid emissions from gas or diesel equipment in portions of the project site where electricity is available.

- Diesel-power construction equipment shall use low-sulfur diesel fuel.

- Water will be used during construction activities to control fugitive dust.

- Suspend grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour.

- Minimize disturbed areas during construction.

- Post and enforce speed limits to reduce airborne fugitive dust from vehicular traffic during construction.

- Ensure that all construction equipment is properly tuned and maintained prior to and for the duration of construction.

- Portable engines and portable engine-driven equipment units used at the project work site, with the exception of on-road and off-road motor vehicles, require CARB Portable Equipment Registration or local APCD permit.

- Provide adequate ingress and egress to minimize vehicle idling and traffic congestion.

AQ-2. The following mitigation measures from the *Otay Ranch General Development Plan Program Environmental Impact Report* (EIR) shall be implemented, where feasible and applicable.

- Minimize simultaneous operation of multiple construction equipment units;

- Use low pollutant-emitting construction equipment as practical;

- Use electrical construction equipment as practical;

- Use catalytic reduction for gasoline-powered equipment;

- Use injection timing retard for diesel-powered equipment;

- Water the construction areas a minimum of twice daily to minimize fugitive dust;

- Stabilize graded areas as quickly as possible to minimize fugitive dust;

- Pave permanent roads as quickly as possible to minimize dust;

- Use electricity from power poles instead of temporary generators during site activities, as feasible;
- Apply chemical stabilizer or pave the last 100 feet of internal travel path within the construction site prior to public road entry;
- Install wheel washers adjacent to a paved apron prior to vehicle entry on public roads;
- Remove any visible track-out into traveled public streets within 30 minutes of occurrence;
- Wet wash the construction access point at the end of each workday if any vehicle travel on unpaved surfaces has occurred;
- Provide sufficient perimeter erosion control to prevent washout of silty material onto public roads;
- Cover haul trucks or maintain at least 12 inches of freeboard to reduce blow-off during hauling; and
- Suspend all soil disturbance and travel on unpaved surfaces if winds exceed 25 miles per hour.

2. BIOLOGICAL RESOURCES

BIO-1 Erosion Control Revegetation - Impacts to non-native grassland habitat and disturbed vegetation/ruderal outside the MSCP Preserve will be mitigated at a 1:1 ratio by reseeding with a standard erosion control seed mix after remediation activities are completed. The revegetation plant palette for the erosion control mix is summarized in Table 11, Erosion Control Revegetation Plant Palette and shall be included in the Erosion Controls notes on all applicable Land Development Permits, including clearing or grubbing and grading. The erosion control seed mix consists of plant species native to San Diego County that are listed as acceptable in all fuel modification zones in all locations under Appendix K of the *City of Chula Vista MSCP Subarea Plan* (refer to Table 11). The mix is designed to germinate quickly and provide vegetative cover for disturbed areas without irrigation. Expected establishment is 45 to 90 days to achieve 80 percent cover after emergence.

Table 11
Erosion Control Revegetation Plant Palette

Species Scientific Name	Common Name	Application Rate (Pounds per Acre)
Eschscholzia calfornica	California poppy	10
Heliotropium currasavicum	Salt Heliotrope	10
Lotus scoparius	Deerweed	10
Total Pounds per Acre		**30**

BIO-2 CSS Restoration Plan - Prior to the issuance of any land development permits (including clearing and grubbing or grading permits) the Project Applicant shall prepare a restoration plan to restore 2.2 acres of disturbed vegetation/ruderal with CSS. The CSS restoration plan shall be prepared by a City approved biologist and to the satisfaction of the Development Services Director (or their designee). The restoration plan shall include, at a minimum, an implementation strategy, appropriate seed mixtures and planting method; irrigation; quantitative and qualitative success criteria; maintenance, monitoring, and reporting program; estimated completion time; and contingency measures. The Project Applicant shall also be required to implement the revegetation plan subject to the oversight and approval of the Development Services Direction (or their designee).

BIO-3 Fencing - Prior to issuance of Land Development Permits, including clearing or grubbing and grading, the project Applicant shall install fencing in accordance with Chula Vista Municipal Code (CVMC) 17.35.030. Prominently colored, well-installed fencing and signage shall be in place wherever the limits of grading are adjacent to sensitive vegetation communities or other biological resources, as identified by the qualified monitoring biologist. In addition, fencing shall also be in place to delineate the modified limits of work associated with RA1 (construction phases 1-3) during the nesting season for of coastal California gnatcatchers (February 15 to August 15) and least Bell's vireo (March 15 to September 15). The modified Limits of Work for phases 1 - 3 are illustrated on Figures 7 – 9 of the Noise Resources Report. All temporary fencing shall be shown on grading plans and shall remain in place during all construction activities. Prior to release of any required grading and/or improvement bonds, a qualified biologist shall provide evidence that work was conducted as

authorized under the approved land development permit and associated plans.

BIO-4 Construction BMPs - Appropriate construction BMPs must be used during construction to ensure avoidance of any indirect temporary impacts to adjacent special status habitats. Examples of BMPs that may be used, if necessary, include but are not limited to those outlined in the project SWPPP, such as dust control measures (WE-1, WM-3, EC-1), training all on-site personnel on the proper use of chemicals and material storage (WM-1, WM-2), spill prevention and control (NS-10, WM-4), waste management (WM-5, WM-7, WM-8, and WM-9), and erosion control devices (EC-3, EC-6, SE-1, SE-5, TC-1, SE-7, EC-15, SE-5, EC-4).

BIO-5 Migratory Birds - To avoid any direct impacts to raptors and/or any migratory birds protected under the MBTA, removal of habitat that supports active nests on the proposed area of disturbance should occur outside of the nesting season for these species (January 15 to August 31). If removal of habitat on the proposed area of disturbance must occur during the nesting season, the project Applicant shall retain a City-approved biologist to conduct a pre-construction survey to determine the presence or absence of nesting birds on the proposed area of disturbance. The pre-construction survey must be conducted within 10 calendar days prior to the start of construction, the results of which must be submitted to the City for review and approval prior to initiating any construction activities. If nesting birds are detected, a letter report or mitigation plan as deemed appropriate by the City, shall be prepared and include proposed measures to be implemented to ensure that disturbance of breeding activities are avoided. The report or mitigation plan shall be submitted to the City for review and approval and implemented to the satisfaction of the City. The City's Mitigation Monitor shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction.

The plan will include measures to restrict construction noise levels to below 60 dB L_{eq} hourly or the existing ambient levels, at the location of any active nest sites for raptors, coastal California gnatcatcher, or least Bell's vireo.

BIO-6 Burrowing Owls - Prior to issuance of any land development permits (including clearing and grubbing or grading permits); the project Applicant shall retain a City-approved biologist to conduct focused pre-construction surveys for burrowing owls. The surveys shall be performed no earlier than 30 days prior to the commencement of any clearing, grubbing or grading activities. If occupied burrows are detected, the City-approved biologist shall prepare a passive relocation mitigation plan subject to the

review and approval by the Wildlife Agencies and City including any subsequent burrowing owl relocation plans to avoid impacts from construction-related activities.

BIO-7a Coastal California Gnatcatcher and Least Bell's Vireo - No remediation activities shall occur within the MSCP Preserve (RA2 and RA3; construction phases 4 to 6) during the nesting season for coastal California gnatcatcher (February 15 to August 15) and least Bell's vireo (March 15 to September 15).

The northern limits of work within RA1 (construction phases 1-3) shall be reduced during the nesting season for coastal California gnatcatchers (February 15 to August 15) and least Bell's vireo (March 15 to September 15) to avoid potential indirect noise impacts. The modified Limits of Work are depicted on Figures 7 to 9 of the *Noise Assessment* report and shall be shown on all grading plans and identified in the field with fencing consistent with Mitigation Measure BIO-3.

BIO-7b Coastal California Gnatcatcher and Least Bell's Vireo - For any work proposed adjacent to the MSCP Preserve in the northern and southern portion of the Project site during the coastal California gnatcatcher and least Bell's vireo nesting season, prior to issuance of any land development permits, including clearing, grubbing, grading permits adjacent to the MSCP Preserve, a pre-construction survey shall be performed in order to determine the presence/absence of these species and extent of any occupied habitat. The pre-construction survey area for the coastal California gnatcatcher and least Bell's vireo shall encompass all suitable habitat within the project work zone, as well as a 300-foot buffer.

The pre-construction survey shall be performed to the satisfaction of the Development Services Director (or their designee) by a qualified biologist familiar with the *City of Chula Vista MSCP Subarea Plan*. The results of the pre-construction survey must be submitted in a report to the Development Services Director (or their designee) for review and approval prior to the issuance of any land development permits and prior to initiating any construction activities. If the coastal California gnatcatcher or least Bell's vireo is detected, a minimum of 300-foot buffer delineated by orange biological fencing shall be established around the detected species to ensure that no work shall occur within while the occupied habitat from February 15 to August 15 for the coastal California gnatcatchers and from march 15 to September 15 for the least Bell's vireo and on-site noise reduction techniques have been incorporated, as appropriate. The Development Services Director (or their designee) shall have the discretion to modify the buffer width depending on site-specific

conditions. If the results of the pre-construction survey determine that the survey area is unoccupied, the work may commence at the discretion of the Development Services Director (or their designee) following the review and approval of the pre-construction report..

BIO-7c Coastal California Gnatcatcher and Least Bell's Vireo - Prior to initiating any remediation activities within RA1 (construction phases 1-3), the Applicant shall construct a temporary noise barrier in one area of the MSCP Preserve to reduce the potential for indirect noise impacts. The location of the temporary noise barrier is depicted on Figures 7 to 9 of the *Noise Assessment* report (TRC, 2012), and shall be shown on all grading plans. The noise barrier will consist of a wall approximately 300 feet long and 10 feet high, construction of a Sound Seal BBC-EXT-R or similar material with the following specifications or similar, taken from the *Noise Assessment* report:

- One pound reinforced mass loaded vinyl with heavy duty VCP faced quilted fiberglass;
- Velcro seam overlaps to connect blankets;
- STC 26 rating (transmission loss value); and
- NRC .70 (sound absorption value).

BIO-8 Biological Monitor Approvals - Prior to issuance of any land development permits, including clearing or grubbing and grading and/or construction permits, the Project Applicant shall provide written confirmation that a City-approved biological monitor has been retained and shall be on-site during clearing, grubbing, and/or grading activities. The biological monitor shall attend all pre-construction meetings and be present during the removal of any vegetation to ensure that the approved limits of disturbance are not exceeded and provide periodic monitoring of the impact area including, but not limited to, trenches, stockpiles, storage areas and protective fencing. The biological monitor shall be authorized to halt all associated project activities that may be in violation of the *City of Chula Vista MSCP Subarea Plan* and/or permits issued by any other agencies having jurisdictional authority over the project.

Before construction activities occur in areas containing sensitive biological resources, all workers shall be educated by a City-approved biologist to recognize and avoid those areas, which have been marked as sensitive biological resources.

BIO-9 HLIT Permit - Prior to the issuance of any land development permits including clearing, grubbing and/or grading, the Applicant shall be required to obtain a HLIT Permit pursuant to Section 17.35 of the City of Chula

Vista Municipal Code. Findings for issuance of a HLIT permit are provided in the *Biological Resources Report* (TRC, 2012) based on Section 17.35.080 of the City of Chula Vista Municipal Code.

BIO-10 SWPPP - The project SWPPP shall be implemented for the duration of the project to control storm water runoff such that erosion, sedimentation, pollution, etc. are minimized (TRC, 2011c). Measures outlined in the plan include the use of silt fencing and straw wattles along disturbed areas during and after grading and around soil stockpiles (SE-1 and SE-5, respectively), and watering trucks during excavation and hauling activities to reduce windborne dust (WE-1). During remediation activities, material stockpiles shall be placed such that they cause minimal interference with on-site drainage patterns. This will protect any downstream special status vegetation from being inundated with sediment laden run-off.

3. CULTURAL RESOURCES

The following mitigation measures shall be included as notes on the grading plans and implemented throughout project implementation.

CR-1 Prior to issuance of land development permits, including clearing or grubbing and grading permits, the applicant shall provide confirmation and incorporate into grading plans, to the satisfaction of the Development Services Director (or their designee), that an archeological monitor will be present during all cutting of previously undisturbed soil.

CR-2 During the initial grading of previously undisturbed soils within the project area, prehistoric and historic resources may be encountered. In the event that the monitor identifies a potentially significant site, the archaeological monitor shall secure the discovery site from further impacts by delineating the site with staking and flagging, and by diverting grading equipment away from the archaeological site. Following notification to the City of Chula Vista, the archaeological monitor shall conduct investigations as necessary to determine if the discovery is significant under the criteria listed in CEQA and the environmental guidelines of the City of Chula Vista. If the discovery is determined to be not significant, grading operations may resume and the archaeological monitor shall summarize the findings in a letter report to the City following the completion of mass grading activities. The letter report shall describe the results of the on-site archeological monitoring, each archaeological site observed, the scope of testing conducted, results of laboratory analysis (if applicable), and conclusions. Any artifacts recovered during the evaluation shall be curated at a curation facility approved by the City.

- For those prehistoric/historic resources that are determined to be significant, alternate means of achieving mitigation shall be pursued. In general, these forms of mitigation include: 1) site avoidance by preservation of the site in a natural state in open space or in open space easements, 2) site avoidance by preservation through capping the site and placing landscaping on top of the fill, 3) data recovery through implementation of an excavation and analysis program, or 4) a combination of one or more of the above measures. Procedures for implementing the alternative forms of mitigation described herein are further detailed in the Mitigation Monitoring and Reporting Program adopted as part of the Otay Ranch General Development Program EIR, EIR 90-01.

- For those sites that are found to be significant resources and for which avoidance and preservation is not feasible or appropriate, the Applicant shall prepare a Data Recovery Plan. The plan will, at a minimum, include the following: 1) a statement of why data recovery is appropriate as a mitigating measure, 2) a research plan that explicitly provides the research questions that can reasonably be expected to be addressed by excavation and analysis of the site, 3) a statement of the types and kinds of data that can reasonably be expected to exist at the site and how these data will be used to answer important research questions, 4) a step-by-step discussion of field and laboratory methods to be employed, and 5) provisions for curation and storage of the artifacts, notes, and photographs will be stated. In cases involving historic resources; however, archival research and historical documentation shall be used to augment field-testing programs.

- Grading operations within the affected area may resume once the site has been fully evaluated and mitigated to the satisfaction of the Development Services Director (or their designee). All significant artifacts collected during the implementation of the Data Recovery Plan shall be curated at a facility approved by the City.

CR-3 Following the completion of mass grading operations, the Applicant shall prepare a plan for the onsite presentation and interpretation of the results of the archaeological studies at an interpretive center or museum. This could be accomplished through adaptive reuse of one of the historic structures within the project or through exhibition within future community centers and/or multi-purpose buildings. It is expected that this interpretive center will only be for temporary curation of those materials being actively used for interpretation and display, and that permanent curation of artifacts and data will be at a regional repository when one is established.

All significant artifacts collected during the implementation of the Data Recovery Plan shall be curated at a facility approved by the City.

CR-4 Prior to the issuance of grading permits for the project, the Applicant shall confirm to the City that a qualified paleontologist has been retained to carry out an appropriate mitigation program. (A qualified paleontologist is defined as an individual with an M.S. or Ph.D. in paleontology or geology who is familiar with paleontological procedures and techniques). A pre-grade meeting shall be held among the paleontologist and the grading and excavation contractors.

CR-5 A paleontological monitor shall be onsite at all times during the original cutting of previously undisturbed sediments of highly sensitive geologic formations (i.e., San Diego, Otay, and Sweetwater formations) to inspect cuts for contained fossils. (A paleontological monitor is defined as an individual who has experience in the collection and salvage of fossil materials.) The paleontological monitor shall work under the direction of a qualified paleontologist. The monitor shall be onsite on at least a half-time basis during the original cutting of previously undisturbed sediments of moderately sensitive geologic formations (i.e., unnamed river terrace deposits and the Mission Valley Formation) to inspect cuts for contained fossils.

- The monitor shall be onsite on at least a quarter-time basis during the original cutting of previously undisturbed sediments of low sensitivity geologic formations (i.e., Lindavista Formation and Santiago Peak Volcanics [metasedimentary portion only]) to inspect cuts for contained fossils. He or she shall periodically (every several weeks) inspect original cuts in deposits with an unknown resource sensitivity (i.e., Quaternary alluvium).

- In the event that fossils are discovered in unknown, low, or moderately sensitive formations, the Applicant shall increase the per-day field monitoring time. Conversely, if fossils are not discovered, the monitoring, at the discretion of the Planning Department, shall be reduced. A paleontological monitor is not needed during grading of rocks with no resource sensitivity (i.e., Santiago Peak Volcanics, metavolcanic portion).

CR-6 When fossils are discovered, the paleontologist (or paleontological monitor) shall recover them. In most cases, this fossil salvage can be completed in a short period of time. However, some fossil specimens (such as a complete whale skeleton) may require an extended salvage time. In these instances, the paleontologist (or paleontological monitor) shall be allowed to temporarily direct, divert, or halt grading to allow

recovery of fossil remains in a timely manner. Because of the potential for the recovery of small fossil remains such as isolated mammal teeth, it may be necessary in certain instances and at the discretion of the paleontological monitor to set up a screen-washing operation on the site.

CR-7 Prepared fossils along with copies of all pertinent field notes, photos, and maps shall be deposited in a scientific institution with paleontological collections such as the San Diego Natural History Museum. A final summary report shall be completed. This report shall include discussions of the methods used, stratigraphy exposed, fossils collected, and significance of recovered fossils.

CR-8 Impacts to areas not planned for mass excavation operations (i.e., open space and parklands) shall be mitigated by setting aside certain portions of these areas as paleontological/geological preserves.

CR-9 If human remains are discovered during grading operations, the archaeological monitor shall secure the discovery site from any further disturbance and shall comply with the California Public Resources Code (PRC) Section 5097.98. If the human remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC will then identify the person(s) thought to be the Most Likely Descendent (MLD) of the deceased Native American. Pursuant to the PRC Section 5097.98, the property owner and the MLD will consult regarding the disposition of the human remains. Grading operations within the affected area may resume once the site has been fully evaluated and mitigated to the satisfaction of the Development Services Director (or their designee). The Archaeological Monitor shall summarize the findings in a letter report to the City following the completion of mass grading activities.

4. TRANSPORTATION

TR-1 Due to the proximity of the project site to Cricket Wireless Amphitheatre, it is recommended that off-site construction-related traffic cease a minimum of two hours prior to the start of an event at Cricket Wireless Amphitheatre. All traffic control, related to this project should be cleared from Heritage Road two hours prior to all events at Cricket Wireless Amphitheatre.

TR-2 Prior to the City's issuance of any Land Development Permits, a traffic control plan shall be prepared to the satisfaction of the City Engineer, Police Chief, and Fire Marshall. At a minimum, the Traffic Control Plan shall identify the type, quantity and location of traffic control signage, striping, detours, flagging operations and any other devices which will be

used during construction to guide motorists safely along public roadways. The traffic control plan shall also include provisions for coordinating with adjacent property owners including Cricket Amphitheater, Knott's Soak City and the Otay Valley Quarry regarding event times and to avoid any conflicts with any existing operational control plans. The Traffic Control Plan will ensure that access and traffic flow will be maintained, and that emergency access will not be restricted.

TR-3 Flaggers are recommended at the project access roads to assist slower moving trucks as they join the traffic flow on Heritage Road.

TR-4 Limits to construction related traffic shall be identified on the Traffic Control Plans that will be prepared and submitted to the City of Chula Vista for approval prior to the issuance of Land Development Permits.

TR-5 Adjustments to haul hours may occur if the addition of truck trips during the a.m. and p.m. peak period result in observed operational issues.

5. NOISE

NOI-1 Noise Barrier-Adjacent to Northern MSCP Preserve. As discussed above, a noise barrier wall, approximately 300 feet long and 10 feet high, will be constructed at the edge of the MSCP Preserve. The barrier will likely be constructed during the nesting season. This barrier, along with the reductions afforded by the existing earthen berm, will allow for construction of phases 1-3 to occur during the nesting season up to the blue line indicated on each figure (Figure 7 through 9 of the *Noise Resources Report* (TRC, 2012)) for each phase, and still be within the allowable limit as discussed in Mitigation Measure 2 below.

NOI 2 Modified Limits of Work During Nesting Season - The noise barrier identified in NOI-1, along with the reductions afforded by the existing earthen berm, will allow for construction of phases 1-3 to occur during the nesting season up to the blue line indicated on each figure (Figures 7 through 9 of the *Noise Resources Report (TRC, 2012)*) for each phase, and still be within the allowable limit. This allowable limit will be included on the grading plans submitted to the City of Chula Vista and will be fenced in the field during construction.

6. PROJECT DESIGN FEATURES:

NS-1, Water Conservation Practices – Water will be used only as needed for dust control during grading operations and to facilitate revegetation, but not to an extent that a surface flow would be created.

NS-9, Vehicle and Equipment Fueling - Vehicle and equipment fueling will be performed at the site during construction.

NS-10, Vehicle and Equipment Maintenance - Vehicle and equipment maintenance will be performed at the site. A spill kit will be maintained at the site and all spills from vehicles will be contained and cleaned up immediately.

WM-1, Material Delivery and Storage – Fuel and equipment maintenance fluids will be delivered and stored onsite using properly sealed containers and stored only in designated areas. Proper secondary spill containment structures will be used to prevent spills from contacting site soil and to prevent exposure to rain.

WM-2, Material Use – Site employees will be trained on proper use of chemicals to minimize spills. Material Safety Data Sheets (MSDS) will be provided for all chemicals being used onsite. Fluid quantities will be documented in the site Construction Materials Inventory Log.

WM-3, Stockpile Management – A fiber roll or silt fence sediment barrier, or earthen berm, will be placed around all stockpiles of soil, concrete demolition waste or other materials, stockpiles may be covered if left inactive or wind erosion occurs.

WM-4, Spill Prevention and Control – Fuel and equipment maintenance fluids will be stored at the site. A spill kit will be maintained at the site and all spills from vehicles will be contained and cleaned up immediately.

WM-5, Solid Waste Management – Solid wastes generated from demolition activities will be promptly removed and disposed at an appropriate off-site facility.

WM-7, Contaminated Soil Management – The purpose of the remediation project is to appropriately manage impacted soils at the site. Therefore, if this California Storm Water Quality Association (CASQA) guidance conflicts with the remediation plan, the Qualified SWPPP Practitioner (QSP) should attempt to reconcile the intent of this guidance with the requirements of the remediation plan. In general, it is anticipated that the site-specific remedial plan will take precedence over this general guidance.

WM-8, Concrete Waste Management – Stockpiles of concrete demolition waste should be managed in accordance with BMP WM-3, Stockpile Management.

WM-9, Sanitary/Septic Waste Management – On-site sanitary facilities will be secured and regularly serviced. They will also have secondary containment.

EC-1, Scheduling – Soil disturbance activities are scheduled to occur over a period of approximately three to four months beginning in June 2012. Soil disturbance activities will consider weather forecast before commencement.

EC-3, Hydraulic Mulch – Hydraulic mulch such as bonded fiber matrix (BFM) will be utilized in inactive disturbed areas and potentially on soil stockpiles if needed. It will be re-applied as necessary. Alternatively, BMP EC-6 may be used especially if water availability and use becomes an issue.

EC-4, Hydroseeding – A city approved seed mix will be applied along with hydraulic mulch (EC-3) to disturbed areas in order to provide final stabilization through revegetation. The hydraulic mulch will provide temporary stabilization while the applied seeds germinate and grow adequately enough to meet permit closure criteria.

EC-6, Straw Mulch – Straw mulch will be utilized in disturbed areas along with a plant-based binder/tackifier. The binder/tackifier will be re-applied as necessary.

EC-15, Soil Preparation/Roughening – Prior to hydroseeding and fiber roll installation, disturbed areas will be prepared in order to facilitate revegetation. Areas that may have been compacted, either incidentally due to heavy vehicle traffic or purposely to avoid subsurface settlement, will have shallow surface soils be disked scarified or otherwise decompacted to facilitate plant growth. Disturbed soils intended for hydroseeding will be roughened in accordance with the CASQA BMP guidance in order to reduce erosion.

SE-1, Silt Fence – Silt fence will be used for perimeter protection along disturbed areas during and after grading. Silt fence may also be used around soil stockpiles.

SE-5, Fiber Rolls – Straw wattles will be placed in hydroseed areas prior to hydroseeding at intervals appropriate for the slope to control eroded sediment. Straw wattles may be used for perimeter protection along disturbed areas during and after grading in areas where expected flows are low. Rolls may also be used around soil stockpiles.

SE-7, Street Sweeping and Vacuuming – roadways will be maintained to prevent soil and sediment from leaving the site property.

SE-10, Storm Drain Inlet Protection – Proper storm water drain protection (e.g. straw wattles, geotextile insert, rock bags) will be employed to prevent sediment run-off into storm drains.

TC-1, Stabilized Construction Entrance/Exit – The ingress/egress point of the excavation area will be surfaced with gravel and use rattle plates to minimize tracking of soil onto stabilized construction roadways and public roads.

WE-1, Wind Erosion Control – A water truck will operate during excavation and hauling activities to reduce windborne dust.